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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/922,856 | 08/07/2001 | Hiroshi Isoda | 2936-0132P | 8540 |

2292 7590 09/22/2004

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

ELAHEE, MD S

| ART UNIT | PAPER NUMBER |
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2645

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,856

Applicant(s)

ISODA, HIROSHI

Examiner

Md S Elahee

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the word "otherwise" on line 9, is indefinite because it is unclear what is coming next following the word.

Regarding claim 5 is rejected for the same reasons as discussed above with respect to claim 3.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda (U.S. Patent No. 6,232,839) and in view of Sano et al. (U.S. Patent No. 4,996,501).

Regarding claim 1, Honda teaches a fixed-gain amplifier circuit whose gain is not controlled by an AGC voltage (abstract; fig. 1; col.3, lines 49-59).

Honda further teaches a variable-gain amplifier circuit whose gain is controlled by the AGC voltage (abstract; fig. 1; col.3, lines 49-59).

Honda further teaches when the AGC voltage is within a predetermined voltage range, an overall gain of the AGC amplifier circuit is varied by the variable-gain amplifier circuit (see fig.6, when voltage V_c is within a certain range then, the gain is varied, otherwise gain is constant).

Honda further teaches when the AGC voltage is outside the predetermined voltage range, the overall gain is kept constant (see fig.6). However, Honda does not specifically teach that the overall gain is kept constant by the fixed-gain amplifier circuit. Sano teaches the overall gain is kept constant by the fixed-gain amplifier circuit (abstract; fig.3; col.3, lines 6-16).

Thus, It would have been obvious to one skilled in the art at the time of the invention to modify Honda to keep the overall gain constant by the fixed-gain amplifier circuit in order to amplify the signal outputted from the variable gain amplifier with a constant gain.

Regarding claim 2, Honda teaches a minimum gain of the AGC amplifier circuit is set to be equal to the gain of the fixed-gain amplifier circuit (col.3, line 62-col.4, line 2).

Regarding claim 3 is rejected for the same reasons as discussed above with respect to claim 1. Furthermore, Honda inherently teaches feeding an identical signal to the fixed-gain amplifier circuit and to the variable-gain amplifier circuit (fig.1).

Allowable Subject Matter

5. Claims 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. Claim 5 is objected to as being rejected under 112, second paragraph, but would be allowable if the 112, second paragraph rejection is overcome.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hirama (U.S. Patent No. 6,788,744) teach Power control circuit and transmitter, Fitzpatrick et al. (U.S. Patent No. 6,128,479) teach Radio frequency amplifier structure and Pugel (U.S. Patent No. 5,020,146) teach Lossy constant bandwidth tuned circuit.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Md S Elahee whose telephone number is (703) 305-4822. The examiner can normally be reached on Mon to Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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M.E.

MD SHAFIUL ALAM ELAHEE

September 10, 2004

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read 'Fan Tsang', is written below the printed name and title.